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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|------------------------|------------------|
| 10/528,088 | 03/16/2005 | Peter Mank | 5613-104US/P29,746 USA | 7093 |

20802 7590 09/18/2006

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| EXAMINER |
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PARSLEY, DAVID J

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| ART UNIT | PAPER NUMBER |
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3643

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/528,088 | Applicant(s) MANK, PETER | |
| | Examiner David J. Parsley | Art Unit 3643 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Preliminary Amendment

1. Entry of applicant's preliminary amendment dated 3-16-05 into the application file is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains implied statements in line 1 and lines 5-6. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,415,718 to Saxby in view of U.S. Patent No. 6,502,516 to Kinchin.

Referring to claim 1, Saxby discloses a projectile having a head and rear part, manufactured from a pin shaped-anterior part – at 1,4, a rod-shaped central part – at 3, connecting rearwardly therewith – see figures 2a-2c, and a piston-like posterior part – at 2 and

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the lower portion of 3, wherein the anterior part – at 1, inserts rearwardly into a blind hole – at 4, of the head and is captively connected therewith – see figures 2a-2c, in that the anterior part is executed as a hollow body – see at 1 in figures 2a-2c, and is connected with the central part via a predetermined breaking point – see at the connection of items 3 and 4 in figures 2a-2c, whereby at the time of firing the central part pushes into the hollow space of the anterior part to such an extent that the upper surface of the posterior part contacts the lower surface of the anterior part – see figures 2a-2c. Saxby does not disclose the head is metal and the rear is plastic. Kinchin does disclose the head – at 12,20, is metal – see column 3 lines 53-59 and the rear – at 14 is made of plastic – see column 4 lines 18-26. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Saxby and add the head part made of metal and the rear part made of plastic of Kinchin, so as to distribute the weight of the device to gain better aerodynamics and flight characteristics during use.

Referring to claim 2, Saxby as modified by Kinchin further discloses the anterior part is provided with air channels – see at the interior of 4 and – at the interior of 1, which make it possible for air to flow into the hollow space of the anterior part upon penetration of the central part – see figures 2a-2c.

Referring to claims 3 and 4, Saxby as modified by Kinchin further discloses barb-sections – see at 15, are provided on the central part – at 3 – see figures 2a-2c, which upon penetration of the central part into the hollow space of the anterior body grab behind a flange – at the bottom surface of 1, in the walls of the hollow space of the anterior part – see figures 2a-2c.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to projectiles in general:

U.S. Pat. No. 3,256,816 to Pilcher – shows projectile with piston assembly

U.S. Pat. No. 3,677,179 to Potteiger et al. – shows projectile with piston

U.S. Pat. No. 3,842,741 to Brothers et al. – shows projectile with piston

U.S. Pat. No. 4,233,902 to Hartley et al. – shows projectile with piston

U.S. Pat. No. 4,624,187 to Becker et al. – shows projectile with piston

U.S. Pat. No. 4,964,341 to Hebert – shows projectile with piston

U.S. Pat. No. 4,977,834 to Denis – shows rifled projectile

U.S. Pat. No. 5,164,538 to McClain – shows rifled projectile

U.S. Pat. No. 5,677,505 to Dittrich – shows projectile with air channels

U.S. Pat. No. 6,422,149 to Saxby – shows projectile with air channels

U.S. Pat. No. 6,492,632 to Pollin – shows projectile with piston assembly

U.S. Pat. No. 6,679,178 to Mihaylov et al. – shows rifled projectile


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890.

The examiner can normally be reached on Monday-Friday from 8am to 4pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Parsley
Patent Examiner
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